Isaac Cheung

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EDUCATION

UNIVERSITY OF BRITISH COLUMBIA

BSc in Computer Science
3rd Year Standing
Vancouver, BC
September 2018 - April 2022

GPA: 3.83 / 4.33
Major GPA: 4.00 / 4.33

LINKS

GitHub:// **github.com/cheungis**
LinkedIn:// **linkedin.com/in/cheungis**
Website:// **cheungis.github.io**

SKILLS

LANGUAGES

Python • Java • C • C++ • C# • Matlab
TypeScript • JavaScript • Ruby • LaTeX
Haskell • Prolog • SQL Server

VERSION CONTROL SYSTEMS

Git / GitHub

TESTING

JUnit • Mocha

OTHER TECHNICAL SKILLS

React.js • Node.js • Three.js • Swing
Pygame • HTML • CSS • Android Studio

COURSEWORK

COMPUTER SCIENCE

Software Engineering
Relational Databases
Artificial Intelligence
Applied Machine Learning
Algorithm Design and Analysis
Computer Graphics
Functional and Logic Programming
Data Structures and Algorithms
Computer Systems
Software Construction
Formal Systems and Logic
Foundations of Computing

MATHEMATICS & STATISTICS

Probability
Linear Algebra
Calculus I, II, III
Applied Statistics

EXPERIENCE

AMAZON (AWS) | Software Development Engineer Intern

May 2020 – September 2020 | Seattle, WA USA | Remote

- Worked on the AWS Server Migration Service team using Java and Ruby.
- Reduced the SMS Console's load time by over 60% through API optimization, leveraging global secondary indexes in DynamoDB to improve filtering.
- Increased the region build automation's coverage from 60% to 90% and removed deprecated dependencies.
- Done through a refactoring of the team's automated region build code in Ruby.

BGC ENGINEERING | Web & Mobile Development Intern

January 2020 – May 2020 | Vancouver, BC Canada

- Worked on Cambio, BGC Engineering's geohazard risk management software using TypeScript, C#, and SQL Server.
- Redesigned Cambio's map identify tool to allow for polygon geometry-based target selections, enabling it to interact with a new client's hazard sites.
- Solved concurrency issues related to the web form logic through the implementation of 2 new helper services.
- Created new React web forms and components, allowing field engineers to electronically document and remotely sync data on hazard sites.
- Fixed numerous bugs in both front and back end of the code base, decreasing the Jira backlog by over 10%.

PROJECTS

SOUNDBOARD | July 2019

- Built a soundboard app using Android studio.
- Employs event listeners implemented with the observer design pattern.
- Created a desktop version using Java Swing.

DISCORD BOTS | January 2019

- Developed 2 bots in JavaScript with Discord JS, a node.js module.
- Designed with best practices, such as dynamic command handling.
- Bot #1 generates links to allow for ease of access to websites.
- Bot #2 automates the process of mass deleting server messages.
- Bot #2 allows for the option of searching and filtering messages to include or exclude attributes, such as the message author.

LEAGUE OF LEGENDS PROFILE ANALYZER | September 2018

- Extracts data from players and store them in profiles to analyze and compare, built with Object Oriented Programming in Java.
- Incorporated design patterns to solve problems encountered during development including the iterator and observer design patterns.
- Unit testing was done with JUnit to ensure the correctness of code.

ENCRYPTER AND DECRYPTER | January 2018

- Constructed a program to encrypt and decrypt messages with Python.
- Employs encryption techniques from trans positional ciphers.
- Added functionality to decrypt messages via brute force approach.